



GEN



ALLEN COUNTY PUBLIC LIBRARY



3 1833 01820 7479

GENEALOGY  
974.202  
M312BH  
1895-1896

## ANNUAL REPORT

OF THE

# BOARD OF HEALTH

OF THE

## CITY OF MANCHESTER, N. H.

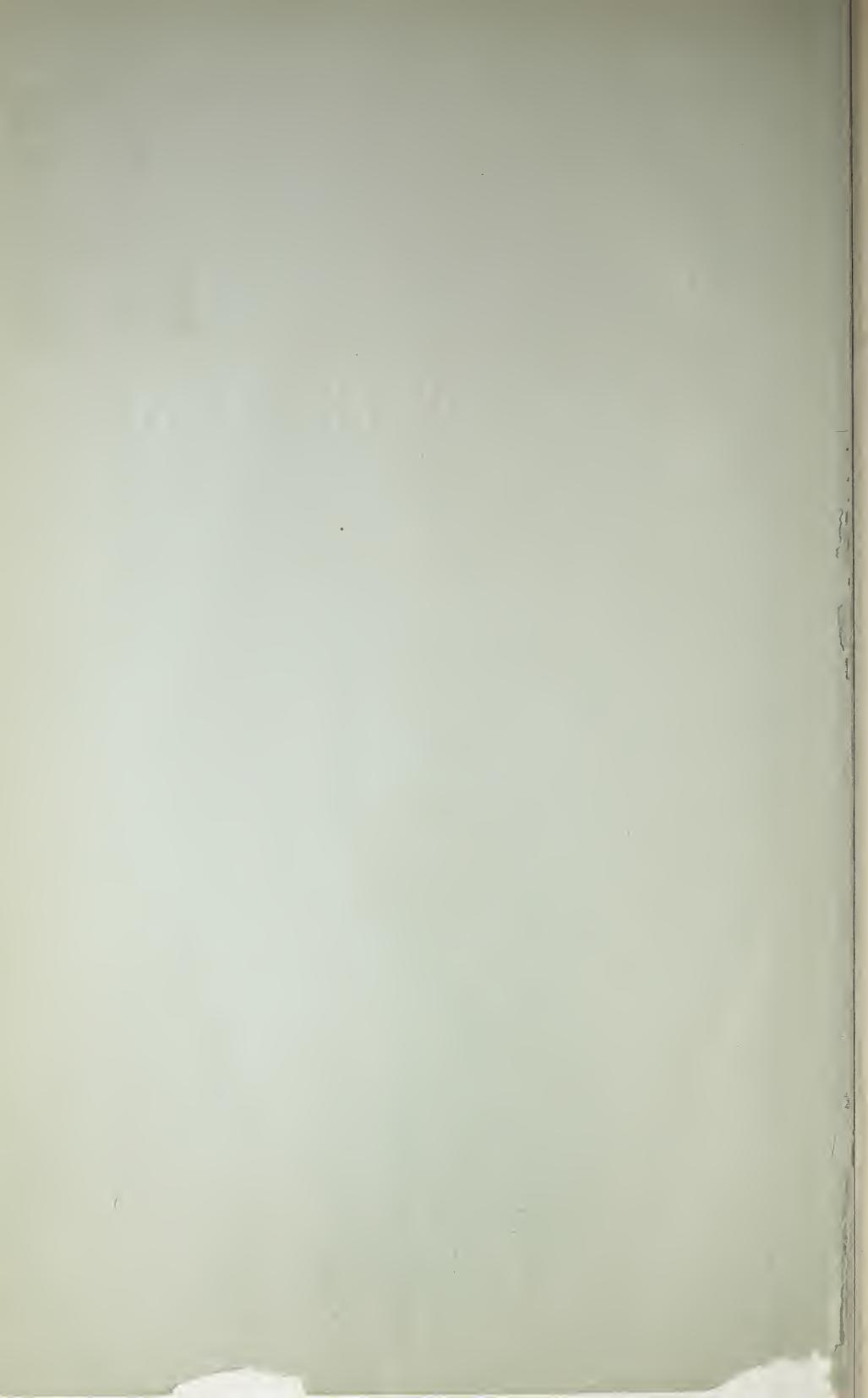
FOR THE YEAR 1895.



MANCHESTER, N. H.

PRINTED BY THE JOHN B. CLARKE COMPANY

1896.



ANNUAL REPORT

OF THE

# BOARD OF HEALTH

OF THE

CITY OF MANCHESTER, N. H.

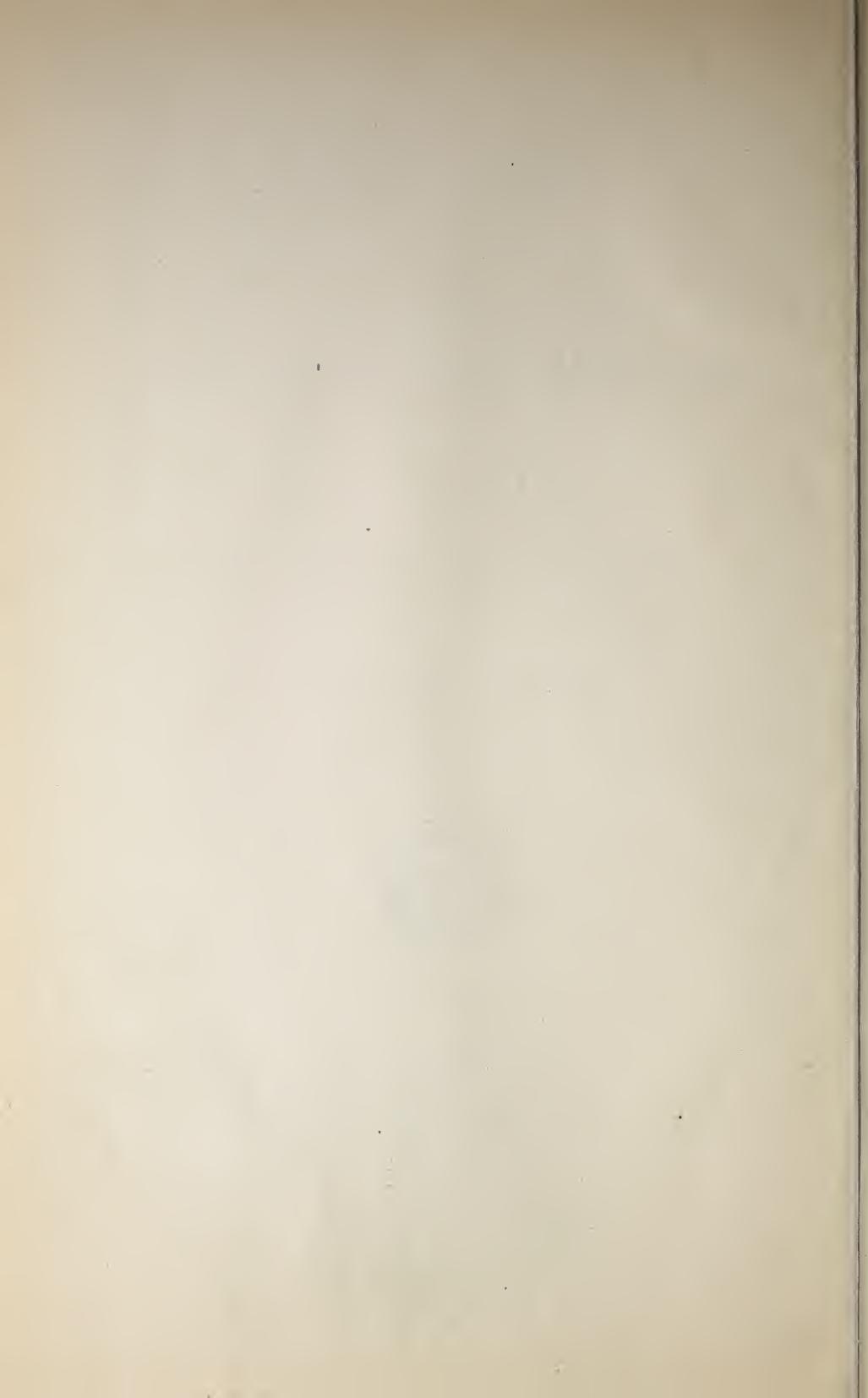
FOR THE YEAR 1895.



MANCHESTER, N. H.

PRINTED BY THE JOHN B. CLARKE COMPANY

1896.



## REPORT OF BOARD OF HEALTH.

---

*To His Honor the Mayor:*

The following is submitted by the Board of Health as its report for the year 1895:

Mr. William K. Robbins was appointed to the board, and began his duties February 1, taking the place of Mr. Joseph B. Sawyer, whose term of office expired at that date. The board was organized with Neil F. Starr, M. D., as chairman, and William K. Robbins, M. Sc., as clerk. Very soon after its organization it caused the following letter, signed by each member of the board, to be sent to Mr. Sawyer and published in the daily papers:

“ Mr. Joseph B. Sawyer having served the city of Manchester for the past ten years as a member of the board of health, we, its present members, desire to give expression to the esteem and good will in which we hold him, and our appreciation of the valuable services he has rendered the public during these years. For the entire time he has been the efficient clerk of the board, and its records have been scrupulously kept. He, with Dr. Hoitt and the late Dr. Webster, constituted Manchester’s first health officials. Having faithfully served the board through its darkest days, when public opinion was somewhat averse to the introduction of sanitary methods, too high an estimate of his conscientious work cannot be made. All his services have been characterized by an impartiality and fearlessness in right doing which has won our highest esteem, and we unite our heartiest good wishes that long years of future usefulness and happiness may be his. It will be a pleasure to put this expression on our records and forward Mr. Sawyer a copy.”

## EXPENDITURES.

The expenditures have been as follows:

Salaries . . . . .	\$600.00
Labor . . . . .	2,653.00
Printing and advertising . . . . .	226.71
Postage and envelopes . . . . .	122.50
Street-car fares . . . . .	71.00
Teams . . . . .	70.00
Pest-house, board, fuel, etc. . . . .	55.84
Board of horse . . . . .	54.86
Telephone service . . . . .	33.30
Office expenses . . . . .	35.05
Legal expenses . . . . .	17.04
Contagious diseases (outside of pest-house) . . . . .	21.19
Disinfectants . . . . .	11.85
Annual inspection Lake Massabesic . . . . .	12.00
Sundries . . . . .	12.42
Total . . . . .	\$3,996.76

This leaves a balance of \$3.24 of the appropriation unexpended.

## MEETINGS.

The increasing amount of work coming under the direction of the department has made frequent meetings and inspections necessary, and early in the summer it was decided that a weekly meeting should be held. Since that time the board has been at the office every Wednesday evening, with one or two exceptions, for the transaction of such business as came to its attention. The usual number of special meetings have been held, and frequent trips or inspection tours have been taken.

## INSPECTORS.

The same inspectors have been retained as during last year. Owing to the change in the law by which burial permits are granted by the board of health, it has been necessary to keep Mr.

Clough in the office eight hours per day, thus throwing a larger proportion of the outside work into Mr. Looney's care. Mr. Barry is still specially detailed to attend to the enforcement of the plumbing regulations.

#### ABATEMENT OF NUISANCES.

The work of cleaning and removing privy-vaults, caring for sink-water, and abating other nuisances has been surrounded by the same conditions as in previous years, and the manner of procedure in such cases has not been materially changed. As in former years, the substitution of water-closets for privy-vaults has been pushed as fast as conditions would warrant. The more densely populated portion of the city is now almost free from privy-vaults, and the work in the residential portion has made good progress.

#### SEWERS.

The board would be pleased to see every street in the city supplied with a sewer, but it realizes the immensity of the undertaking, and it is much gratified with the progress now being made. The board would, however, earnestly recommend that the collection of a fee for entering sewers be abolished. Many people feel it an injustice to be compelled to pay for entering a sewer that their property has already been taxed to help construct. The cost of putting in a plumbing system is no light burden to many householders, and when this improvement is forced upon them by the action of the board the increase in expense due to the fee often puts the citizen to so much trouble as to cause what was intended as a benefit to become a hardship. This fee has been used several times as an excuse that action be deferred until the householder becomes better able financially to bear the expense, and in many cases it has operated to the detriment and delay of needed improvements.

#### PLUMBING.

Another year's experience with the plumbing regulations has confirmed our belief in their usefulness and necessity. The pre-

ceding year's experience and observation had taught us that some changes were necessary, and such changes were put in force early in the season. The results have been satisfactory. Several citizens have asked to be allowed to infringe upon the regulations, alleging as an excuse that the substances to be thrown into the fixtures were only clean water or something equally harmless. Such people have been instructed that the danger from defective plumbing is not in the matter that goes into the drains, but from the gas that is generated in and rises from the pipes and sewers. The men engaged in the business are, as a rule, self-respecting and honest, and their work is a credit to the trade. The law as at present construed allows any one who registers at the office of the board of health to engage in the business, and occasionally someone who is incompetent from lack of knowledge and experience, attempts to pursue the occupation. The work done by such "plumbers" is far from satisfactory. There are others, happily few in number, who understand their business and are fairly good workmen, but who are dishonest and endeavor to defraud their customers with work or material not up to the standard. The board hopes in time to have the advantage of such measures as will enable them to determine the fitness of an applicant for registration, and also to weed out the dishonest and incompetent already engaged in the business.

#### TENEMENT BLOCKS.

The most difficult and unsatisfactory work of the board of health relates to tenement blocks. Such blocks are usually built so as to secure the greatest number of rooms on the land occupied. The plumbing and ventilation are of secondary consideration. Bedrooms not directly connected with the outer atmosphere but whose light and air must come through other rooms are a common occurrence. Plumbing fixtures are designed to occupy dark corners or out-of-the-way places where the room cannot be conveniently utilized in any other way. Water-closets especially are liable to become nuisances if not well lighted and ventilated. This bad arrangement is not the result of acci-

dent but the plans are drawn and accepted, showing conclusively that it is the intention of the builder to so construct the block. The board has vigorously protested during the past season against such a manifest disregard of sanitary laws, but its power is limited in the matter and at best it can only enforce such few suggestions as slightly improve but do not remedy the evil. We would therefore earnestly recommend that there should be some authority to pass upon the plans of such buildings before their construction is commenced, and insist that such important matters as sanitation and ventilation be properly arranged for.

Eleven old blocks or buildings have been ordered put into sanitary condition during the past year. The board has met with considerable opposition in its efforts in this direction. Many of the tenement blocks were erected before sanitary plumbing had become so important a factor in the arrangement of our dwelling places, and such blocks are not constructed so as to properly protect traps, etc., from frost when they are provided. While the board realizes this to be partly true it cannot, in justice to itself and the occupants of tenements of such blocks, allow such occupation of tenements it believes to be unsanitary. It will therefore continue its present policy in such matters.

#### DISPOSAL OF WASTES.

The city dumps have been inspected several times and the board fully realizes that a proper disposal of a city's waste is a problem that requires much patient effort to solve. At present the material sent to the dump consists mostly of ashes, old plaster, leaves, grass, limbs of trees, old wooden and paper boxes, and papers mixed with such swill and other perishable matter as finds its way into the scavenger's cart. This is dumped into some ravine at a point where a street is to be built and a thin layer of soil spread on top. The mass, consisting as it does of matter that is in part perishable, in time decomposes and a gas is generated that finds its way out through the sides which are not covered. This gas is, we believe, unwholesome and it is certainly

unpleasant to the sense of smell. The mass also settles as it decomposes and in time the roadway sinks and holes are formed that have to be filled with soil or road material. The board believes that the same labor that is expended in caring for the dump would be better engaged in separating the wood, grass, paper, and in fact any combustible perishable matter from the ashes and imperishable matter and in burning the former. The ashes resulting from such burning could be thrown in with the imperishable wastes and the result would be a mass of material that would not cause offense by decomposing nor would the roadway thus made need more than the ordinary repair.

The city farm teams have continued to collect the swill, etc. Part of it is fed to swine and the rest is plowed into the soil for manure. Both the collection and disposal have been done in a satisfactory manner. A considerable amount of swill is collected by private parties, and many of them do their work in a fairly neat and creditable way. There are some, however, who arrange to go ahead of the city teams and cull over the swill in the buckets, transferring the better part of it to their wagons. This is unfair to the city farm. That of course is a small matter, but many of the drivers facilitate their selection by turning the swill in the receptacle onto the ground, and do not properly clean up the same before they leave. This swill left on the ground creates a nuisance that is finally removed by the scavenger service cart, which takes it to the dump there to become a source of offense to the residents in the immediate vicinity. It would be well if some means were devised to place the private swill gatherers under better control, and an ordinance to that effect would be appreciated by the board.

## CONTAGIOUS DISEASES.

The following table shows the number of contagious diseases reported during each month of the year and the deaths resulting therefrom:

MONTHS.	Membranous croup.		Diphtheria.		Typhoid fever.		Measles.		Scarlet fever.		Totals.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
January .....	4	3	14	5	2	.....	.....	.....	2	1	22	9
February .....	1	1	5	.....	3	1	1	.....	3	.....	13	2
March.....	.....	.....	.....	.....	2	1	2	.....	.....	.....	4	1
April.....	.....	3	.....	.....	1	.....	8	.....	3	.....	15	....
May .....	1	1	8	3	3	1	28	1	2	.....	42	6
June.....	1	.....	5	.....	1	1	6	.....	2	1	15	2
July.....	1	1	2	.....	5	.....	11	.....	9	.....	28	1
August.....	.....	.....	.....	14	3	3	.....	6	.....	.....	23	3
September.....	2	1	1	1	19	5	5	.....	10	.....	37	7
October.....	1	1	2	.....	12	5	3	.....	8	1	26	7
November.....	6	3	4	2	4	2	1	.....	5	1	20	8
December.....	.....	3	.....	7	2	.....	.....	5	.....	.....	15	2
Total.....	17	11	47	11	73	21	68	1	55	4	260	48

The table following, which contains the number of cases of contagious diseases and the deaths resulting therefrom during the past eleven years, is put in for the purpose of comparison.

YEARS.	Mem-branous croup.		Diphthe-ria.		Typhoid fever.		Scarlet fever.		Measles.		Totals.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1885.....	*	*	*	18	*	20	*	5	*	36	*	79
1886.....	*	*	*	9	*	12	*	.....	*	5	*	26
1887.....	*	*	73	17	28	18	94	4	*	9	*	48
1888.....	*	*	126	30	35	12	44	1	187	9	392	52
1889.....	*	*	79	23	36	16	259	5	54	4	428	48
1890.....	*	*	41	9	36	17	63	3	298	6	438	35
1891.....	*	*	21	2	76	18	25	.....	89	2	211	22
1892.....	*	*	26	5	33	11	44	2	451	11	554	29
1893.....	*	*	7	1	79	15	110	5	212	2	408	23
1894.....	12	12	42	11	74	21	67	3	223	8	418	55
1895.....	17	11	47	11	73	21	55	4	68	1	260	48

\* No returns made during this year.

By a glance at the above tables, it will be seen that the number of cases of contagious and infectious diseases was less during the year than for any of the three preceding years. It will also be noticed that the decrease is due to the falling off in the number of cases of measles rather than to a diminished number of the more dangerous contagious and infectious diseases. The number of cases of diphtheria, scarlet fever, and typhoid fever, and the deaths therefrom, have been normal. The regulations for the restriction and prevention of such diseases have been amended so as to be more effective and the inspectors have been ordered to be particularly efficient in their enforcement. Such an enforcement is sometimes the cause of considerable inconvenience to people living in houses where such diseases exist. The department has seen to it, however, that all such people were

supplied with the actual necessities of life. The expense incurred, when small, has been paid for from the appropriation for this department. When the amount called for was too large to warrant its being so disposed of the cases were referred to the overseers of the poor. This latter disposition of such cases has been unsatisfactory and unjust because the recipient of such help becomes, in the legal sense, a pauper and, if a citizen, is deprived of his right to vote. Through the recommendation of this board the city councils have increased the appropriation at the disposal of the department for 1896, and it is probable that in future all such cases can be attended to in a manner that will cause no hardship to result therefrom.

## DEATH RETURNS.

TABLE SHOWING THE MORTALITY OF THE CITY BY DISEASES  
AND BY MONTHS FOR THE YEAR 1895.

CAUSES OF DEATH.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Abscess of brain.....	.	.	.	.	.	.	.	.	.	1	.	.	1
" of kidney.....	.	.	.	.	.	.	.	1	.	.	.	.	1
" of liver.....	1	.	.	.	.	.	.	.	.	.	.	.	1
Abscesses and perit'ritis.....	.	.	.	1	.	.	.	.	.	.	.	.	1
Accident, burns.....	.	.	.	.	.	3	.	.	.	.	.	.	3
" comp'nd frac-	.	.	.	.	.	.	.	.	.	.	.	.	1
" ture of ankle.....	1	.	.	.	.	.	.	.	.	.	.	.	1
" crushing of ab-	.	.	.	.	.	.	.	.	.	.	.	.	1
" domen.....	.	.	.	.	.	.	1	.	.	.	.	.	1
" drowning.....	.	.	.	.	1	.	.	1	.	.	.	.	2
" fracture neck.....	.	.	.	.	.	.	.	.	.	.	.	.	1
" of thigh.....	1	.	.	.	.	.	.	.	.	.	.	.	1
" fract're of skull.....	.	.	.	.	.	.	.	.	1	.	1	.	1
" killed by cars.....	1	1	.	.	.	.	1	1	.	.	.	.	2
" poisoning.....	1	.	.	.	.	.	.	.	.	.	.	.	1
" rupture j'un'm.....	.	.	.	.	.	.	.	.	.	.	1	.	1
" sh'ck from el'e- tric wire.....	.	.	.	.	.	.	.	.	.	.	.	1	1
Albuminuria from preg- nancy.....	.	.	.	.	1	.	.	.	.	.	.	.	1
Alcoholism, chronic.....	.	.	.	.	1	.	.	.	.	.	.	.	1
Anæmia.....	2	1	4	1	.	1	1	2	2	2	.	.	16
" pernicious.....	.	1	.	.	.	.	.	.	.	.	.	.	1
Aorta, spleen & kidney, bullet wound in.....	1	2	1	.	.	1	.	3	2	1	.	.	1
Apoplexy.....	1	2	1	.	2	2	1	3	2	1	.	.	15
Asphyxia.....	.	.	.	1	2	1	.	.	.	1	.	.	4
Asthma.....	1	1	.	.	.	.	1	.	.	.	.	.	1
" and influenza.....	1	.	.	.	.	.	.	.	.	.	.	.	3
Bladder, ulceration of.....	.	.	1	.	.	.	.	.	.	.	.	.	1
Bowels, dyspepsia of.....	1	.	.	.	.	.	.	.	.	.	.	.	1
" hemorrhage of.....	.	.	.	.	1	.	1	.	1	.	.	.	1
" inflammation of.....	.	.	.	.	1	.	.	.	.	1	.	.	3
" obstruction of.....	.	.	.	.	.	.	.	.	1	.	.	.	1
" stricture of.....	.	.	.	.	.	.	.	.	1	.	.	.	1
Brain, congestion of.....	.	2	4	1	.	1	.	1	.	.	1	.	9
" disease of.....	.	.	.	.	.	.	.	1	3	1	1	1	7
" inflammation of.....	.	.	.	.	.	3	.	1	1	.	.	.	5
" paralysis of.....	.	.	.	.	.	.	.	.	1	.	.	.	1
" softening of.....	.	.	.	1	1	.	.	1	1	.	.	.	4
Bright's disease.....	.	2	.	1	.	.	.	1	1	.	.	.	1
" acute.....	2	.	2	1	2	.	1	1	1	1	.	.	11
" & cancer.....	.	1	.	.	.	.	.	.	.	.	.	.	1
" chronic.....	.	2	1	.	.	1	1	.	.	.	.	.	2
Bronchitis.....	4	7	4	5	4	5	2	1	3	5	3	.	43
" acute.....	.	.	.	1	.	.	.	.	.	1	.	.	2
" capillary .....	3	2	3	1	.	.	.	.	.	1	.	.	10
" chronic.....	2	1	.	.	.	.	.	.	.	.	1	.	4
Cachexia.....	.	.	1	.	.	.	.	.	1	.	.	.	1
Cancer.....	.	.	1	.	.	.	.	1	1	.	.	.	2
" of bowels.....	.	.	1	.	.	.	.	1	1	.	.	.	2
" of liver.....	1	.	.	.	.	.	.	1	1	.	.	.	3

TABLE.—*Continued.*

TABLE.—*Continued.*

CAUSES OF DEATH.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
	8	4	4	2	3	1	2	2	4	4	11	6	
Heart, disease of.....													50
" " & Bright's dise'se.....	1	1			1								2
" hypertrophy of.....													1
" malformation of.....		1											1
" neuralgia of.....			1										1
" valvular disease of.....	1	3	4	1	3	2		4					18
Hemorrhage.....													1
" & ulceration of stoma'h.....	1												1
" broncho pul-monary.....									1				1
" cerebral.....	1					1				2			3
" post part'm.....													1
Hemiplegia.....							1			1			2
Hepatitis.....		1			1						1		1
" acute.....	1		1										2
Hernia.....										1			1
" strangulated.....						2	2	1					5
Hydrocephalus.....											1		1
" acute.....													1
Ileo colitis.....	1		1	3	4	4	2	3	3		3		24
Inanition.....													
Inflammation of large intestine.....				2	1								1
Influenza.....			1										3
" and pneumonia.....													1
" acute and cere-bral hyper-aëmia.....													1
Intussusception.....							1						1
Laryngismus stridulus, opium poisoning.....			1										1
Laryngitis.....	1									1			2
" acute catar'al											1		1
" syphilitic.....									1				1
Liver, congestion of.....			1				1						2
" cirrhosis of.....				1			1	1					2
" disease of.....						1	2				1		4
" hypertrophy of.....							1	1					2
Locomotor ataxia.....		2		3		4	1	1	1	3	1	4	20
Lungs, congestion.....	2		3		4	1							
" disease of.....				1									1
" hemorrhage of.....	1										1		2
" œdema of.....		1									2		2
Marasmus.....	2		1					1	3	2	2		13
Measles.....					1								1
Melanosis, mesenteric.....	1												1
Meningitis.....	4	3	2	1	2	3	7	6	1	3	3		35
" cerebral.....	1	1			1				1		1		5
" cerebro spin'l.....								1			1		2
" tubercular.....						1			1		1		3
Myelitis, chronic.....	1					1							2
Nervous prostration.....								1					1
Old age.....	2	2	1			1	1	2	2	3		4	18
Paralysis.....	1	2	1			1		2		1			8
" and gangrene.....	1				1						1		1
Paraplegia.....											1		2

TABLE.—*Continued.*

CAUSES OF DEATH.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	
Pharyngitis .....										1			1	
" laryngo-traumatic .....													1	
Peritonitis .....	2	1		1	1	2	1			1	1	1	10	
" acute .....			1					1					1	
" chronic .....	1												2	
" and stone in bladder .....														
Pericarditis .....		1											1	
" with effusion .....			1										1	
Phthisis .....	1		1										3	
" pulmonary .....	5	12	6	5	7	4	2	6	3	10	8	8	76	
" pulmonary, and meningitis .....														
Pleurisy .....	1	1	1							1	1	1	5	
" chronic .....					1								1	
" purulent .....												1	2	
Pneumonia .....	12	9	7	3	6	4	4	3	1	3	8	8	68	
" broncho .....	1		1	1				1					6	
" pleuro .....		1	1		2								5	
" pleuro and gangrene of lungs .....			1										1	
" pleuro and meningitis .....									1				1	
" typhoid .....	1			1									1	
" and hiccough .....	1												1	
" and meningitis .....	1												1	
" and polypus of heart .....														
Premature birth .....	1				1			3	4	2	3	3	1	18
Prenatal causes .....					1									1
Rheumatism, cardiac .....	1													1
Sarcoma, melanotic .....	1													1
Spina bifida .....					1									1
Spine, Pott's disease of .....														1
Stillborn .....	10	3	8	7	9	9	9	7	8	6	8	2	86	
Stricture of rectum, syphilitic .....							1							1
Stomach, cancerous humor of .....									1					1
" ulceration of .....						1								1
Suicide .....											1			1
" hanging .....	1													1
" poison .....									1					1
" gunshot wound .....	1													1
Syphilis, hereditary .....						1								1
Tuberculosis of bowels .....	2													2
Tumor .....	1				1						1			2
" abdominal .....														1
" abdom'nal, shock from operation for .....				1										1
" fibroid .....					1					1				1
" ovarian fibroid .....														1
Typhilitis .....							1							1
Unavoidable neglect .....									1					1
Unknown .....	2	2			1						1		6	
Uræmia .....								2			1	1		2
Whooping cough .....														2
Total .....	85	99	93	67	86	72	104	14	113	92	81	73	1106	

## SOME COMPARISONS OF VITAL STATISTICS FOR THE LAST ELEVEN YEARS.

	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.
Population, estimated .....	37,884	39,032	40,215	41,433	42,689	44,126	45,500	48,000	50,000	55,000	55,000
No. deaths, exclusive of still-births.....	733	725	798	833	764	901	833	139,34	20,06	19,42	977
Deaths per thousand of population.....	19.35	18.57	19.84	20.59	17.90	20.40	19.34	500	527	17.76	18.54
Deaths of children under five years.....	312	313	356	387	353	434	383	500	527	546	549
Ratio, deaths of children to total deaths, per cent.....	42.56	43.17	44.61	46.54	46.20	48.17	44.66	51.42	50.62	55.89	53.82
Deaths of children per thousand of population.....	8.24	8.02	8.85	9.58	8.27	9.87	8.64	10.42	10.54	9.91	9.38
Deaths from zymotic diseases.....	231	205	256	227	199	252	181	153	137	209	213
Deaths from zymotic diseases, per thousand of population.....	6.10	5.25	6.37	5.48	4.66	5.72	3.98	3.18	2.74	3.80	3.97
Cholera infantum.....	89	115	148	115	86	141	122	103	89	140	146
Consumption .....	93	109	93	109	79	94	84	79	74	76	76
Group.....	12	21	25	24	25	15	7	3	4	24	14
Diphtheria .....	18	9	17	30	23	9	2	5	1	11	10
Bronchitis, all forms.....	29	11	29	37	35	38	38	39	44	56	59
Pneumonia, all forms.....	42	26	39	45	38	58	72	39	53	81	86
Heart disease, all forms.....	40	37	45	23	47	43	38	48	46	52	75
Scarlet fever.....	5	5	4	1	5	3	2	2	5	3	4
Typhoid fever.....	20	12	17	12	16	17	18	11	15	8	21
Measles .....	36	5	8	9	4	6	2	11	2	4	1
Whooping cough.....	11	3	1	5	6	4	5	2	2	2	2
Small-pox .....	3	1,207	1,391	*838	*872	*965	*985	1,178	1,491	1,247	1,440
Births reported .....	1,106	1,30	1,34	1,39	1,39	1,43	1,43	519	637	630	616
Births per thousand of population.....	29	19	451	473	459	506	463	559	593	593	593
Marriages reported.....	404										

\*The returns are manifestly incomplete.

The table of deaths given shows the death rate to have been a little less than the average for the past ten years. The number of deaths of children under five years of age is still alarmingly large. We are in hopes that in time some way may be found to take better care of the little ones. Certain it is that we cannot hope for much of a reduction in our death rate while 53 per cent of the total number of deaths are of children under five years of age. In some of the larger cities the mortality among children has been much reduced by the introduction and use of sterilized milk. It is probable an attempt will be made in that direction the coming summer in this city.

The granting of burial permits has been in charge of the board for a part of the year. This change will, we hope, in time lead to more accurate statements as to the causes of death, and thus make the statistics published by the board of more value for scientific purposes. In this connection we would earnestly request the physicians to aid us as much as possible by taking extra pains to be definite and accurate in all returns with which they have to do. It will be noticed that the term "cause not stated" has been eliminated from the table and that the number in which the cause is given as unknown is not so large as to cause comment.

The thanks of this board are hereby extended to all who have aided in the work, and most particularly to your Honor for the benefit we have received from your advice and support.

NEIL F. STARR, M. D.,  
C. W. DOWNING, M. D.,  
WILLIAM K. ROBBINS, M. Sc.,

*Board of Health of Manchester.*

## INSPECTORS' REPORT.

---

*Gentlemen of the Board of Health:*

We beg leave to submit the following as the report of the sanitary inspectors for the year 1895:

Vaults and privies inspected	.	.	.	.	.	1,274
Vaults inspected after cleaning	.	.	.	.	.	782
Water-closets inspected	.	.	.	.	.	1,005
Yards and alleys inspected	.	.	.	.	.	1,320
Cellars inspected	.	.	.	.	.	954
Barns and outbuildings inspected	.	.	.	.	.	239
Tenements inspected	.	.	.	.	.	813
Barn cellars inspected	.	.	.	.	.	314
Latrines inspected	.	.	.	.	.	25
Teams and riggings of excavators inspected	.	.	.	.	.	47
Soaperies, slaughter-houses, etc., inspected	.	.	.	.	.	23

Cleaning or repairs were ordered as follows:

Vaults cleaned	.	.	.	.	.	138
Yards and alleys cleaned	.	.	.	.	.	214
Cellars cleaned	.	.	.	.	.	318
Barn cellars cleaned	.	.	.	.	.	17
Barns, etc., cleaned	.	.	.	.	.	26
Tenements cleaned	.	.	.	.	.	27
Privies cleaned	.	.	.	.	.	27
Latrines cleaned	.	.	.	.	.	2
Water-closets cleaned or repaired	.	.	.	.	.	262
Vault covers repaired	.	.	.	.	.	62
Leaky drainpipes repaired	.	.	.	.	.	33

Complaints to the number of 443 have been investigated. Relief has been given in 318 cases and in 125 cases it was found that no cause existed, or the same was beyond the control of the department.

Openings other than leaks in the drainage system were found in 66 places and the same were closed by order of the department. One thousand two hundred sixty sinks have been examined and traps were provided upon 645.

Sewage was found running on the surface of the ground in 108 places and such nuisances were abated either by entering the sewer or by carrying away in some manner not offensive.

It has been necessary to make 2,786 calls and write 1,192 letters in doing the work of the department.

Forty-one dead animals have been properly disposed of.

One hundred nineteen hens and small animals have been ordered removed from cellars.

The people in 101 tenement blocks have been warned against throwing garbage into the street.

The city dumps have been inspected 25 times and nuisances there to the number of 5 abated by the street department.

Private swill collectors have been notified 37 times to be neater in their work.

Householders have been given 34 permits to clean their own vaults.

Two hundred ninety-seven notices have been prepared and served and proper returns made.

Eight samples of water from wells about the city have been sent away for analysis.

Eleven complaints have been made against the scavenger service. In each case the proper parties were notified and relief afforded.

Twenty-two catch-basins or street cesspools were flushed or repaired by the street department at the request of the inspectors.

Seventy-one nuisances not otherwise classified have been abated through the efforts of this department.

One hundred thirteen swine and 13 cows were discovered be-

ing kept within the sanitary limits without licenses. The same were removed or licenses procured.

In two places, where no privy accommodations had been provided, the owners were ordered to provide water-closets.

An entire circus train was inspected on complaint that some of the employees were suffering from smallpox.

Leaky drains to the number of 33 were ordered repaired.

Eleven blocks were ordered put into sanitary condition, including the plumbing therein.

Permits to the number of 788 were granted for the removal of dead bodies, and the returns forwarded to the city registrar.

Weekly reports of contagious and infectious diseases have been sent to the state board of health, Concord, and the United States Marine Hospital service, Washington, D. C.

Contagious and infectious diseases have been reported as follows: Measles, 68; diphtheria, 47; scarlet fever, 55; membranous croup, 17; typhoid fever, 73; total, 260.

Two hundred thirty-two of the cases were reported by physicians and 28 by householders or discovered by the inspectors.

The inspectors were unable to trace the cause of the disease in 136 cases. In 95 cases the connection with some previous case was clearly traceable. Six people contracted the disease outside the city, and in 13 cases it was reasonable to attribute the cause to unsanitary surroundings.

In 96 cases disinfectants were being used. The inspectors ordered their use in 164 places. At most of these latter places instructions were given as to their use and in many of them the department furnished the disinfectants.

At 51 dwellings it was necessary for the inspectors to order isolation. In nearly all these cases the inspectors were obliged to give instructions as to the steps to be taken.

Fourteen houses were watched to see that the rules of isolation were complied with, and 16 funerals were attended to prevent a too public observance of the same.

Eighteen tenements where disease had existed were fumigated by the inspectors.

Thirty-eight children who were attending school and forty people who were working and resided in houses where contagious diseases existed were restrained from attendance at school or employment until all danger from contagion had passed.

Two cases have been cared for at the contagious disease hospital during the past year.

One hundred and fifty houses have been placarded and the placards removed at the termination of the sickness.

About 1,000 pamphlets issued by the state board of health have been distributed in localities where contagious diseases existed.

A monthly statement of mortality has been prepared and copies sent to over 200 other towns and cities and to local physicians, etc.

Addison Streeter was employed as sanitary patrolman at Lake Massabesic 73 days. He was aided by the sanitary inspectors 20 Sundays and holidays.

There has been no material change in the number of buildings during the past season except the addition of four new buildings there, and the old buildings were inspected frequently and the following other work done :

Bathers to the number of 99 were ordered from the water and warned not to enter it again.

Five hundred and fifteen dead fish were removed from the lake or its shore and buried. Two dead snakes, two dead turtles, and a dead frog were also cared for.

At 12 places it was necessary to order swill and slops deposited farther away from the water.

Several picnics were visited and the managers warned to prevent the careless disposal of waste and rubbish.

A party was caught washing clothes and another was caught washing dishes in the lake. Both were reprimanded and warned.

Twenty-one parties were warned as to the disposal of sink-water, swill, etc.

Nuisances to the number of seven not otherwise classified were abated.

Rags, papers, tin cans, and rubbish of all sorts has been removed whenever found.

The inspection of plumbing has as last year been attended to by Richard J. Barry with the following results :

Number of jobs reported . . . . .	810
tank water-closets . . . . .	1,175
pressure closets . . . . .	178
Kelley & Genesee closets . . . . .	19
sinks . . . . .	870
bath-tubs . . . . .	422
wash-bowls . . . . .	370
wash-trays . . . . .	61
slop-hoppers . . . . .	9
urinals . . . . .	18
 Total number fixtures put in . . . . .	 3,122

The pipe put in was tested with water at 773 places.

At 21 places where water was not accessible the smoke test was used instead of water.

A total of 1,775 inspections were made of the work during its progress and after completion.

Defective work was found as follows :

Lines of pipe leaking . . . . .	213
Split pipe . . . . .	34
Ventilation defective . . . . .	41

At 127 places defective work was found that is not otherwise classified.

Several plumbers were caught trying to deceive the inspector by using black wax and resin on joints that should have been made tight with molten lead. In one case a cotton batting blanket had been wound around the soil pipe at a point where it would be likely to escape the notice of the inspector, and it was absorbing the water that came from several small leaks above. Perhaps the most flagrant case was one where the plumber put a plug in a four-inch pipe about a foot from the top and poured a couple of pails of water on top of it. This trick was discovered and the plug removed by the inspector, who saw that the pipe was properly filled and tested.

The inspector has been to some trouble to secure from his reports the following statistics as to new buildings, which he thinks may be interesting :

Total number reported, 232.

Single tenement buildings	.	.	.	.	.	.	.	126
Two	"	"	.	.	.	.	.	51
Three	"	"	.	.	.	.	.	50
Four	"	"	.	.	.	.	.	3
Five	"	"	.	.	.	.	.	1
Six	"	"	.	.	.	.	.	5

One each of twelve, eight, sixteen, twenty, and twenty-two tenements.

New schoolhouses, 2 ; churches, including one rebuilt, 3 ; shoe shop, 1 ; large livery stable, 1 ; sub-police station, 1 . The Sacred Heart hospital was rebuilt, also an emergency ward for the Elliot hospital.

The total value according to his best judgment was \$585,000.

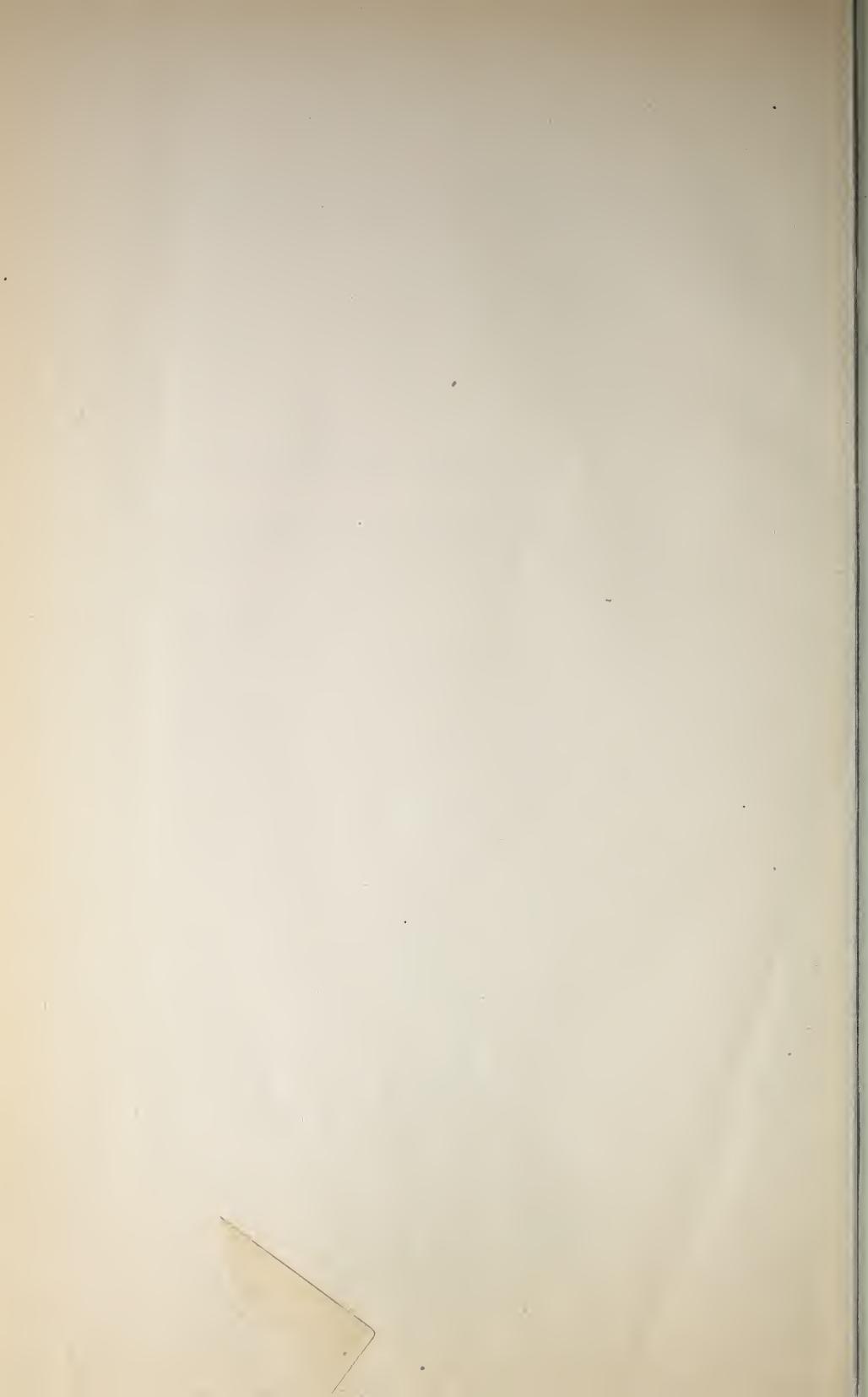
There have been 28 firms, employing 185 men, engaged in the plumbing business during the past year.

The inspectors hereby extend their sincere and heartfelt thanks to all who have aided them in the work of the department, and most especially to the members of the board of health, who have so ably directed their efforts.

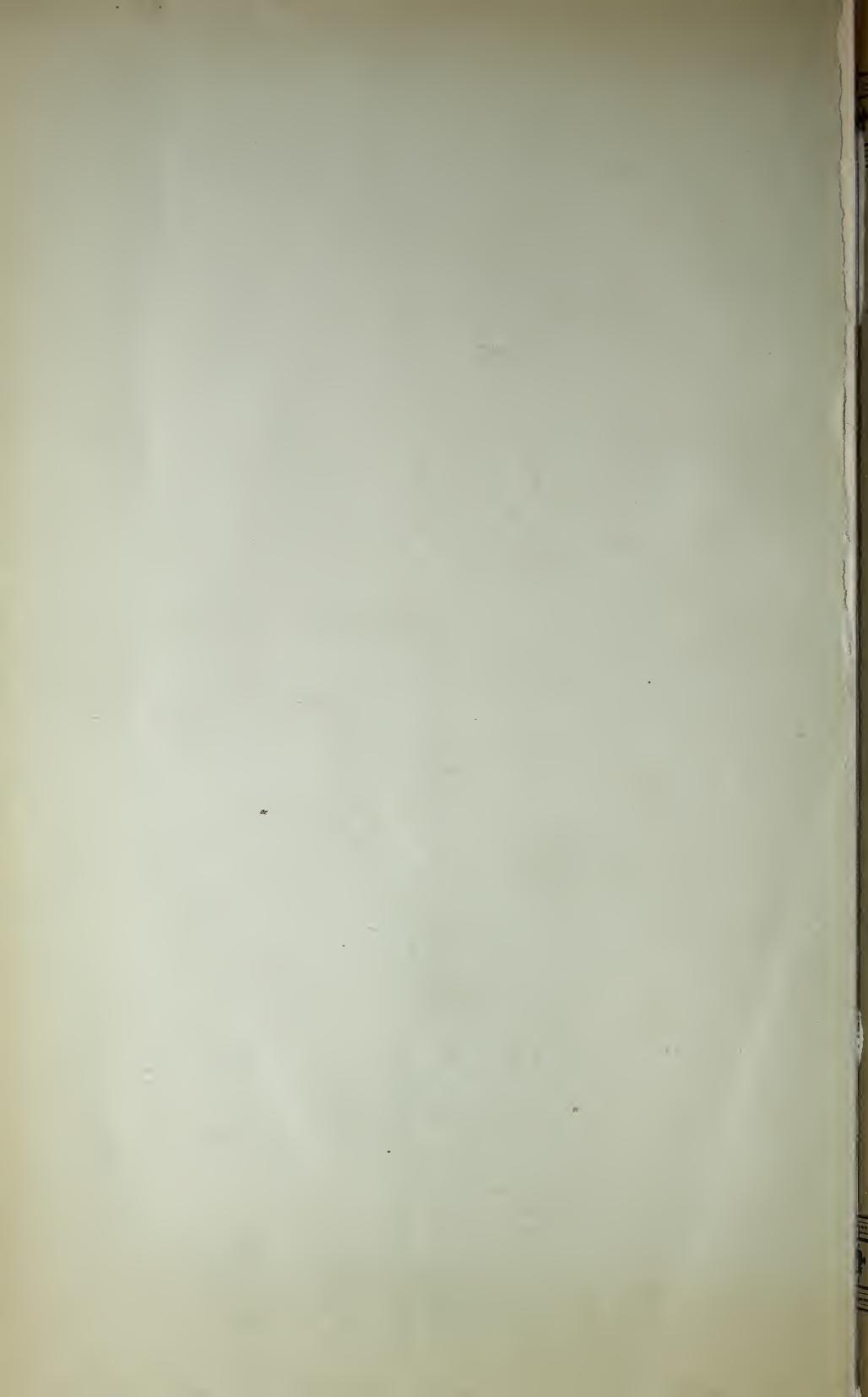
HERBERT S. CLOUGH.

JOHN F. LOONEY.

RICHARD J. BARRY.







REPORT

---

... OF THE ...

\* \* \* BOARD OF HEALTH

... OF ...

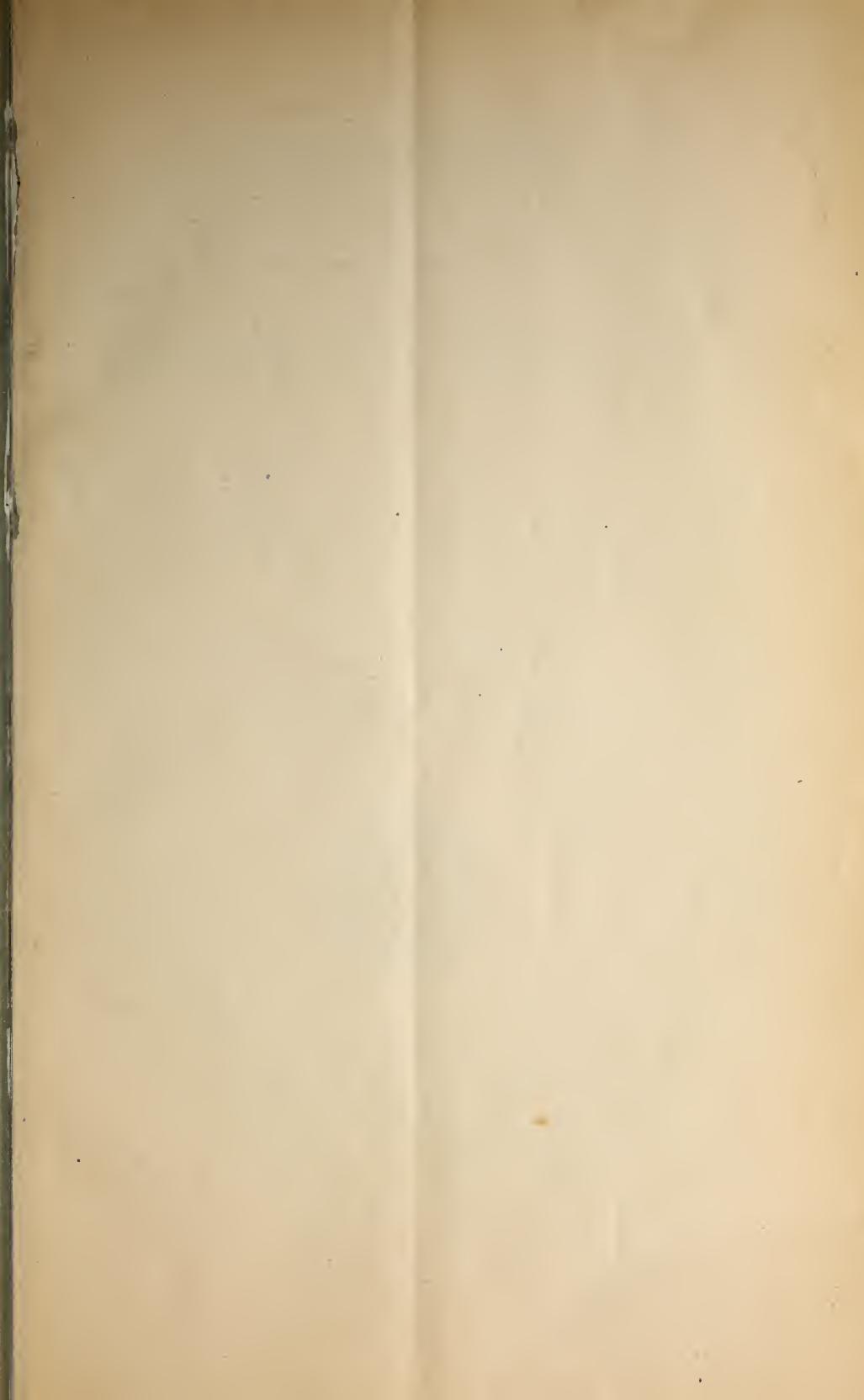
MANCHESTER, N. H. \*

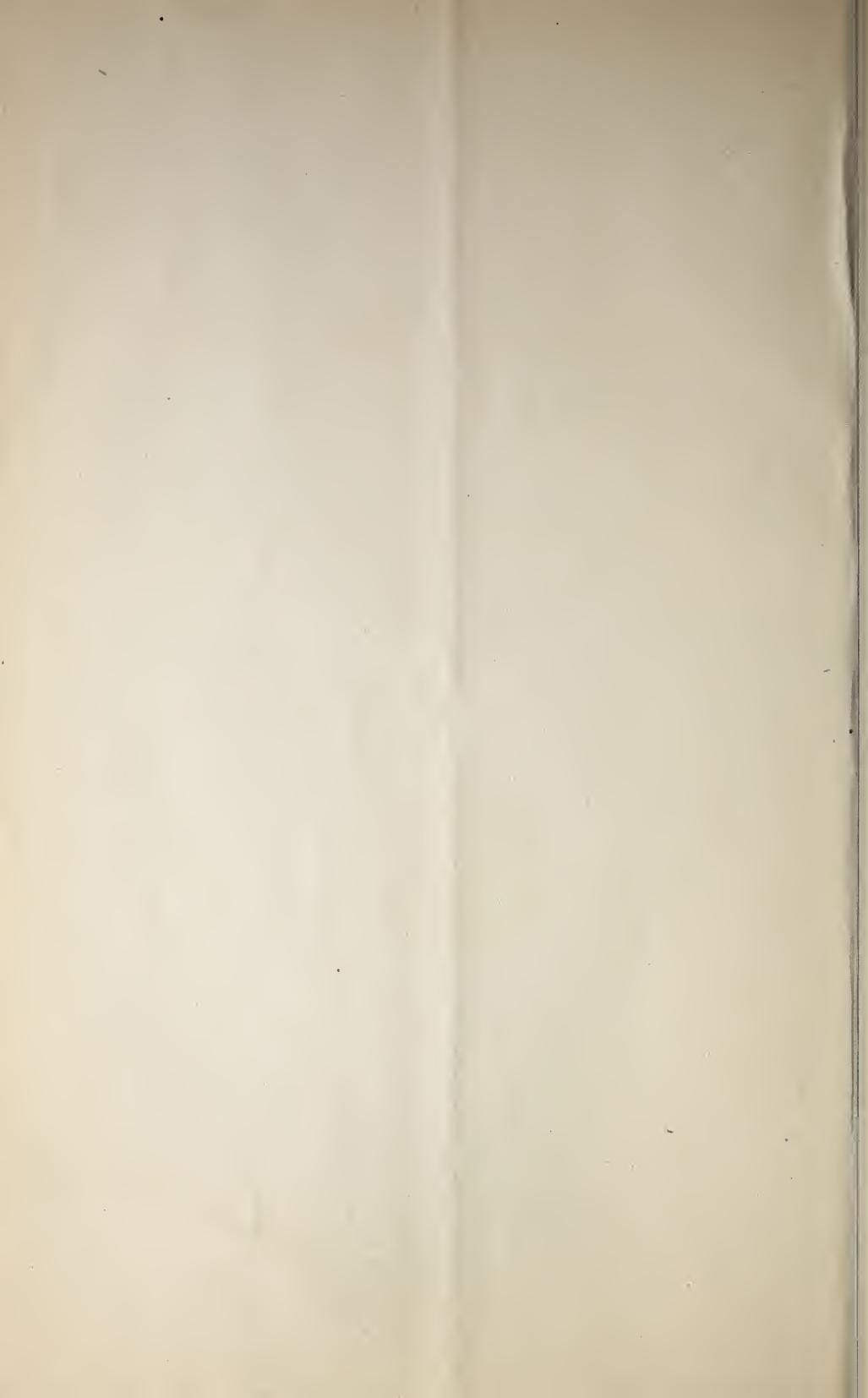
---

1896









# ANNUAL REPORT

OF THE

# BOARD OF HEALTH

OF THE

CITY OF MANCHESTER, N. H.

FOR THE YEAR ENDING

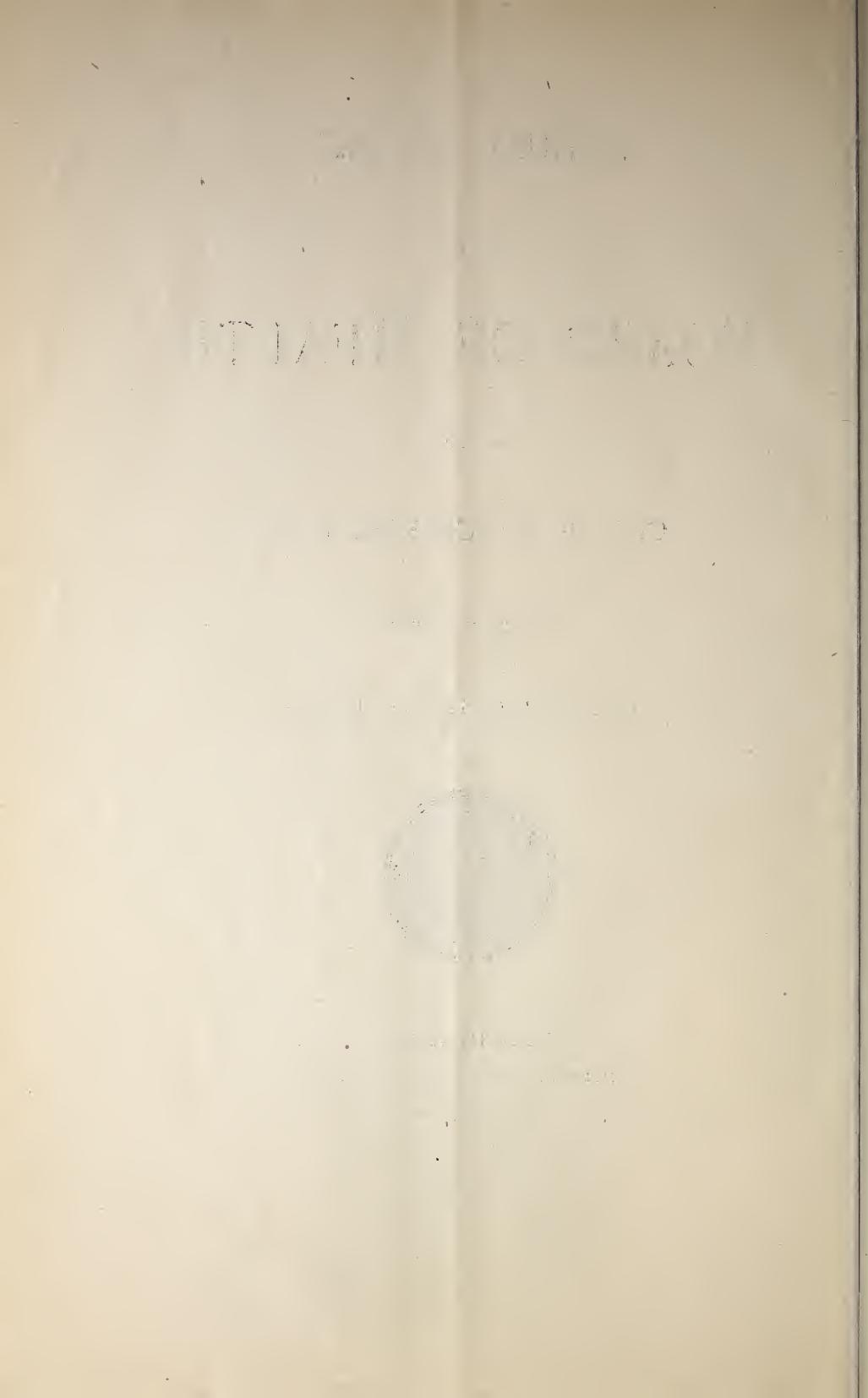
DECEMBER 31, 1896.



MANCHESTER:

PRINTED BY THE JOHN B. CLARKE CO.

1897.



## REPORT OF THE BOARD OF HEALTH.

---

*To His Honor the Mayor:*

The following is submitted by the Board of Health as its report for the year 1896:

Dr. C. W. Downing having been re-appointed to succeed himself, the board organized by re-electing Dr. C. F. Starr as chairman, and William K. Robbins, M. Sc., as clerk. Early in the year Dr. C. F. Starr resigned on account of ill health, and William J. Starr was appointed to serve out his term of office. Dr. C. W. Downing was then elected chairman of the board to serve out the unexpired time of Dr. Starr.

### EXPENDITURES.

Salaries.....	\$620.83
Labor.....	2,740.01
Office furniture.....	35.82
Printing and advertising.....	209.25
Postage and envelopes.....	14.93
Team.....	59.50
Car fares.....	73.95
Board of team.....	102.74
Express.....	7.90
Telephone service.....	36.50
Gas.....	1.68
Legal expenses.....	16.74

Antitoxin .....	\$64.15
Diphtheria examinations.....	29.00
Disinfectants.....	50.33
Aid given families quarantined.....	36.65
Board, fuel, etc., for pest-house.....	37.35
Sundries.....	25.86
 Total .....	 \$4,163.19

## MEETINGS.

The regular weekly meetings begun last year have been continued, it having proved a convenience to the public to know that the board may be found at its office every Wednesday evening at 7 p. m. Besides this, a somewhat smaller number of special meetings have been held, and the usual number of trips of inspection have been made.

## INSPECTORS.

The same inspectors have been retained as during last year. The board felt that it was losing much of the value of Mr. Clough's services as an inspector and executive officer by keeping him in the office to attend to the granting of burial permits; so, in place of employing a man to give his whole time to the patrolling of Lake Massabesic, Miss Ethel A. Marston was employed to take charge of the office, thus relieving Mr. Clough, and giving the board two inspectors free from office duties. The work was therefore so arranged that, during the summer months, one or both of the inspectors should spend some part of each day at the lake. In this manner we believe the source of the city's water supply was guarded quite as well as usual.

Mr. Barry was retained as last year to give his special attention to the enforcement of the plumbing regulations.

#### SEWERS.

The progress made during the year in putting in sewers is gratifying to the board, and we would suggest that special attention be given to the locality where there are springs, as in such, cesspools are of no avail, and troublesome nuisances result from attempts to use them. Especially is this the case in the southeastern part of the city.

#### PLUMBING.

The administration of the plumbing rules has proceeded much the same as last year. While there is a better general voluntary compliance with the regulations, there are still some difficulties in the way of the best sanitary arrangement and location of the drainage of buildings. It is to be expected that in old buildings some concessions must be made in location; but it is very much to be regretted that, owing to the absence of building inspectors, new buildings are constantly being erected wherein the drainage is located where it may be put in cheapest, and will be as far as possible from frost.

The plumbing work in general has been more skillfully done, owing to the discontinuance of several parties who followed, but scarcely knew, the trade of a plumber.

#### TENEMENT BLOCKS.

Fewer tenement blocks have required the attention of the board this year than usual, but there are still many that require constant watching, and some that the board will insist must be renovated soon.

#### DISPOSAL OF WASTES.

The various dumps about the city have given the board more than the usual work this year; not that they are any worse than usual, they have always been decidedly bad,

but because houses are being erected on or near them. The board is fully convinced that all the dumps now in use should be discontinued at once, and it will use every legitimate means to bring this about. The time has arrived when our general wastes must be disposed of, either by burning or by removal far out of the city, and we would recommend that, until a crematory can be installed, a contract of some kind be made with the Boston & Maine Railroad to remove the wastes by rail. For this purpose, cars specially fitted could be left at various parts of the city to receive the waste, and could be taken off to some distant swamp or waste land each day. The present arrangement for collecting the garbage, with some slight amendments, will give satisfaction for a while.

First, the ordinance requiring swill and other matters kept separate by the householders, should be rigidly enforced; and second, the private swill-gatherers should be put under control. At present, they roam about the city, taking any desirable swill they find, with no uniformity of time or manner. It will be taken from some houses so long that the city farm teams will discontinue looking for it, and then it will be left, and complaint made. Again, it often happens that several different swill teams will go through the same back street the same day, or even the same hour. This board would recommend that an ordinance be passed requiring all private swill-gatherers to be licensed by the Health Department, said license being revokable when all regulations are not properly observed. In such case we could prescribe the vessels and vehicles for transportation, and manner and time of gathering. For instance, if Mr. A. wants to take the swill of Smith and Jones in one back street or block, he must also take that of Brown and whoever else lives in that district, so that no team other than that of Mr. A. will cover that

territory. In such a manner a very considerable saving of territory covered by the city farm team would be made, and at a corresponding economy; also the number of swill teams frequenting a given locality would be reduced to one.

#### CONTAGIOUS DISEASE HOSPITAL.

The large number of contagious diseases during the year has impressed upon us anew the need this city has for a proper place of refuge for these diseases. The improper location of the place now used for such purposes was deeply impressed upon us during this summer, when we found it necessary to remove a case of varioloid from a hotel, and put it in the most popular public park of the city. We would again most earnestly urge upon your Honor, and through you the city councils, the great and immediate need of a contagious disease hospital.

The following tables show the number of cases of contagious and infectious diseases reported during each month of the year, and the deaths resulting therefrom; also the average number of cases and deaths for the past twelve years, which is put in for the purpose of comparison:

MONTHS.	Membranous croup.		Diphtheria.		Typhoid fever.		Measles.		Scarlet fever.		Vario- loid.		Totals.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
January ...	....	....	2	1	10	3	....	....	9	1	....	....	21	5
February...	....	....	1	....	12	5	1	....	9	....	....	....	23	5
March.....	1	1	2	....	9	3	1	....	10	....	....	....	23	4
April .....	2	1	2	....	6	1	7	....	1	....	....	....	18	2
May .....	....	....	1	....	4	....	8	....	2	....	....	....	15	....
June .....	1	1	....	....	8	1	31	1	2	....	1	....	43	3
July.....	....	....	....	....	2	2	27	1	4	....	....	....	33	3
August...	1	....	2	1	6	1	19	....	3	....	....	....	31	2
September...	....	....	8	1	10	....	6	....	2	....	....	....	26	1
October....	4	4	28	7	7	1	61	....	6	....	....	....	106	12
November..	4	4	19	3	1	1	93	....	8	....	....	....	125	8
December..	4	3	38	15	6	2	246	1	5	....	....	....	299	21
Totals ...	17	14	103	28	81	20	500	3	61	1	1	....	763	66

YEARS.	Membraneous croup.		Diphtheria.		Typhoid fever.		Measles.		Scarlet fever.		Vario- loid.		Totals.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1885.....	*	*	*	18	*	20	*	5	*	36	*	...	*	79
1886.....	*	*	*	9	*	12	*	...	*	5	*	...	*	26
1887.....	*	*	73	17	28	18	94	4	*	9	...	...	*	48
1888.....	*	*	126	30	35	12	44	1	187	9	...	...	392	52
1889.....	*	*	79	23	36	16	259	5	54	4	...	...	428	48
1890.....	*	*	41	9	36	17	63	3	298	6	...	...	438	35
1891.....	*	*	21	2	76	18	25	...	89	2	...	...	211	22
1892.....	*	*	26	5	33	11	44	2	451	11	...	...	554	29
1893.....	*	*	7	1	79	15	110	5	212	2	...	...	408	23
1894.....	12	12	42	11	74	21	67	3	223	8	...	...	418	55
1895.....	17	11	47	11	73	21	55	4	68	1	...	...	260	48
1896.....	17	14	103	28	81	20	500	3	61	1	1	...	763	66

\* No returns made during this year.

Inspection of these tables will reveal the fact that the number of contagious diseases is much larger than for several years. It will be noticed that the increase is due principally to the greater number of cases of measles and diphtheria. One probable reason for the excessive number of cases of measles is doubtless want of isolation of patients. Many people seem to have a strange prejudice against the placarding of their premises, and as this disease is usually not considered dangerous, in many cases no physician was called. The people ignorantly or willfully failed to report the cases, and from such, of course, the public had no protection. It is a relief to know that the death-rate from this disease has been very low.

Diphtheria has, during the year, especially the latter part, been very prevalent. There have been reported to

the board 120 cases, with a mortality of 42, a fraction over 30 per cent. The board has been vigilant in trying to suppress the disease; with what result, no one can tell; but it is safe to say that something has been accomplished by isolation, quarantine, and disinfection. There has seemed to be no common cause of the disease, as nearly all sections of the city have suffered. We have feared that the dumps, which are a standing menace, while not directly responsible, have, in some instances, aggravated the malady. The serum treatment of the disease, which may still be regarded as *sub judice*, is still sufficiently recognized to warrant the board in keeping on hand reliable antitoxin, which is furnished to physicians at cost for such of their patients as are able to pay for it; to those unable to pay for it, it is furnished gratis. We think a few lives have been saved by its timely use.

Of the other diseases there have been about the usual number. Measles is placarded, but not quarantined. Scarlet fever and diphtheria, however, are maintained by the board in strict quarantine as nearly as practicable.

The special item, for use in aid of destitute families, in the appropriation this year, was most timely, as the quarantine left many people in need of the necessaries of life, and these were furnished by the board upon investigation, nothing being paid for except what was ordered specifically by the inspectors. The board feels that in this way much suffering has been relieved, and that the spread of the disease has been materially checked.

#### DISINFECTION.

During the year the board has had constructed a lamp, invented by Prof. F. C. Robinson, which generates formaldehyde gas from methyl alcohol, or "wood spirit." This gas is generally conceded to be more effective as a disinfectant than sulphur fumes, and at the same time

less liable to injure fabrics and colors. This method of fumigation has, therefore, been in use the latter part of the year. It costs more than sulphur, hence the expense for disinfectants is somewhat increased.

DEATH RETURNS.

In the granting of burial permits we have insisted upon more careful statements of the causes of death, and although this has at times entailed some extra labor upon undertakers and physicians, we think the accuracy of our statistics upon this subject justifies the extra pains and bother.

## DEATH RETURNS.

TABLE SHOWING THE MORTALITY OF THE CITY BY DISEASES  
AND BY MONTHS FOR THE YEAR 1896.

TABLE.—Continued.

TABLE.—*Continued.*

TABLE.—*Continued.*

CAUSES OF DEATH.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Pharyngitis.....	1												1
Phthisis, pulmonary .....	5	15	14	12	14	5	11	6	14	7	7	6	116
Placenta previa.....										1			1
Pleurisy, purulent.....										1			1
Pneumonia.....	7	3	5	4	7	4	3		3	8	5	12	61
" broncho.....	1			1	1		1	1	1		1	2	9
" & heart disease.....		1										1	1
" & paralysis.....		1								1		2	2
" pleuro.....								1		1			2
" typhoid.....	1	1											2
Poisoning, a&c'te alc'olic	1		4		2	2	4					1	14
Premature birth.....							1						1
Prostration, nervous.....			1			1			1				3
Pyemia.....				1									1
Rectum, stricture of.....					1								1
Rheumatism, acute.....						1							1
" muscular.....			1										1
Scleroses, posterior spin'l	1												1
Sorofulosis.....							1						1
Septicæmia.....				1	1								2
Shock, from operation.....					1								1
Spina bifida.....	1												1
Stillborn.....	7	3	10	7	8	8	8	3	7	7	10	7	85
Stomach, abscess of.....						1				1			1
" hemorrhage of.....													1
" ulceration of.....				1									2
Suicide, hanging.....		1						2	1				4
" knife wound.....		1											1
" shooting.....		1											1
Sunstroke.....									1				1
Syphilis, congenital.....			1						1			1	1
" hereditary.....			1										2
Tetanus, traumatic.....	1												1
Tuberculosis.....	1	1				1						2	5
" of bowels.....			1										1
" of septicæmia.....						1							1
Ulcer, gastric.....										1			1
" of leg.....					1								1
Unknown.....	1	1		3	2		1			2	1	1	11
Uraëmia.....		2							1		1		4
Totals.....	73	80	91	99	101	74	135	108	98	91	86	100	1136

## SOME COMPARISONS OF VITAL STATISTICS FOR THE LAST TWELVE YEARS.

	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.
Population, estimated.....	37,884	39,032	40,215	41,433	42,689	44,126	45,500	48,000	50,000	55,000	56,000	56,000
No. deaths, exclusive of still-births	733	725	798	853	764	901	901	880	963	971	1,020	1,051
Deaths, per thousand of population	19.35	18.57	19.84	20.59	17.90	20.40	19.34	20.06	19.42	17.76	18.54	18.77
Deaths of children under five years	312	313	356	397	333	434	393	500	527	546	549	531
Ratio, deaths of children to total deaths, per cent.....	42.56	43.17	44.61	46.54	46.20	48.17	44.66	51.02	50.62	55.89	53.82	50.52
Deaths of children per thousand of population.....	8.24	8.02	8.85	9.58	8.27	9.87	8.64	10.42	10.54	9.91	9.38	9.48
Deaths from zymotic diseases.....	231	206	256	227	199	252	181	153	137	209	213	227
Deaths from zymotic diseases, per thousand of population.....	6.10	5.25	6.37	5.48	4.66	5.72	3.98	3.18	2.74	3.80	3.97	4.05
Cholera infantum.....	89	115	148	115	86	141	122	108	89	40	146	129
Consumption.....	93	109	93	169	79	94	84	89	79	74	76	112
Croup.....	12	21	25	24	25	15	7	3	5	24	14	20
Diphtheria.....	18	9	17	30	23	9	2	5	1	11	10	28
Bronchitis, all forms.....	29	11	29	37	35	38	38	39	44	56	59	61
Pneumonia, all forms.....	42	26	39	45	38	58	72	39	53	81	86	77
Heart disease, all forms.....	40	37	45	23	47	43	38	48	46	52	75	77
Scarlet fever.....	5	4	1	1	5	3	2	5	3	4	1	1
Typhoid fever.....	20	12	17	12	16	17	18	11	15	8	21	19
Measles.....	36	5	8	9	4	6	2	2	4	1	3	3
Whooping cough.....	11	3	1	6	4	5	2	2	2	2	2	3
Smallpox.....	3	1	1	1	1	1	1	1	1	1	1	1
Births reported.....	1,106	1,207	1,391	*330	*872	*965	*985	1,178	1,491	1,247	1,440	1,714
Births per thousand of population.....	29.19	30.92	34.59	473	439	506	468	649	637	650	616	659
Marriages reported.....	404	451	404	404	404	404	404	404	404	404	404	404

\* The returns are manifestly incomplete.

The number of deaths of children under five years of age is still unreasonably large, and the usual cause of death is preventable by sufficient and proper care and feeding. The board has given what encouragement it could to the use of sterilized milk. In this connection we are impressed that material aid in the direction of wholesome food for children might be secured by a more vigorous inspection of milk sold in this city. As the business is at present conducted, milk may well be considered as a dangerous source of food. The inspection of it should extend to the very source of production, and all milk refused sale in the city, where the health of the cattle and cleanliness of the stable is not first-class. In this matter the health department is powerless, as the inspection of milk is at present beyond our jurisdiction.

In conclusion, we would express our thanks to your Honor, the city councils, and many citizens who have given us encouraging and timely assistance.

C. W. DOWNING, M. D.,

WILLIAM K. ROBBINS,

WILLIAM J. STARR,

*Board of Health of Manchester.*

## INSPECTORS' REPORT.

---

*Gentlemen of the Board of Health:*

We beg leave to submit the following as the report of the sanitary inspectors for the year 1896:

Vaults and privies inspected.....	646
Vaults inspected after cleaning.....	625
Water-closets inspected.....	2,359
Yards and alleys inspected.....	1,952
Cellars inspected.....	1,599
Barns and outbuildings inspected.....	82
Tenements inspected.....	382
Barn cellars inspected.....	271
Latrines inspected.....	16
Teams and riggings of excavators inspected....	13
Soaperies, slaughter-houses, etc., inspected.....	14

Cleaning or repairs were ordered as follows:

Vaults and privies cleaned.....	107
Yards and alleys cleaned.....	367
Cellars cleaned.....	479
Barn cellars cleaned.....	21
Barns, etc., cleaned.....	17
Tenements cleaned.....	42
Water-closets cleaned or repaired.....	398
Vault covers repaired.....	24
Leaky drainpipes repaired.....	36

Openings other than leaks in the drainage system were found in 64 places, and same were closed by order of the

department. One thousand three hundred and three sinks have been examined, and 603 have been provided with traps.

Sewerage was found running on the surface of the ground in 73 places, and such nuisances were abated either by entering the sewer or carrying away in some manner not offensive.

In doing the work of the department it has been necessary to make 2,357 calls, and to write 1,209 letters.

Three hundred and ninety-eight complaints have been investigated. In 269 cases the inspectors have been able to give relief, and in 129 cases it was found that no cause existed, or that same was beyond the control of the department.

Thirty-eight dead animals have been properly disposed of.

One hundred and seventy-six hens and small animals have been removed from cellars.

One hundred and forty-five swine and cows have been discovered being kept within the sanitary limits of the city, without licenses. Same were ordered removed or licenses procured.

Twelve complaints were made against the scavenger service; in each case the proper parties were notified and relief afforded.

Eleven persons were discovered throwing garbage in the back street, and were warned against the practice.

Private swill collectors have been notified seventeen times to be neater in their work.

Eighteen catch-basins or street cesspools have been flushed or repaired by order of this department.

Eighty-eight notices have been prepared and served, and proper returns made.

A sanitary inspection has been made of 25 bakeshops.

Two theaters were ordered cleaned and put into proper sanitary condition.

Circus grounds have been inspected six times, and nuisance abated once.

Stable bedding was found in back street in 19 places, and ordered removed.

The dumps have been inspected 72 times, and nuisances there to the number of 4 abated by the street department.

One hundred and fifty-six nuisances not otherwise classified have been abated through the efforts of this department.

Thirty-three samples of water secured from Lake Masabesic and springs and wells about the city, have been sent away for analysis.

Householders have been given 26 permits to clean their own vaults.

Permits to the number of 1,347 have been granted for the burial or removal of dead bodies, and the returns forwarded to the city registrar.

A statement of mortality has been prepared each month, and copies sent to over two hundred other towns and cities, to local physicians, etc.

Contagious and infectious diseases have been reported as follows: Measles, 500; diphtheria, 103; typhoid fever, 81; membranous croup, 17; varioloid, 1; total, 763. six hundred and forty-one of these cases were reported by physicians, 48 by householders, and 74 were discovered by the inspectors. The inspectors were unable to trace the cause in 413 cases; in 308 cases the connection with some previous case was clearly traceable. Colds were the probable cause in 22 cases; 5 cases were contracted outside of the city; and in 15 cases it was reasonable to attribute the cause to unsanitary surroundings.

In 110 cases disinfectants were being used. The inspectors ordered their use in 153 cases. At most of these latter places instructions were given as to their use, and in many cases the department furnished the disinfectants.

In 59 cases patients were found well isolated, and in 182 cases inspectors were obliged to order isolation. In nearly all of these cases it was necessary for the inspectors to give instructions as to the steps to be taken.

Nine houses were watched to see that the rules of isolation were complied with; and 14 funerals were attended to prevent a too public observance of the same.

Fifty houses where disease had existed were fumigated by the inspectors.

Ninety-seven children who were attending school, and 86 people who were working and living in houses where contagious disease existed, were either restrained from attending school and employment, or instructed as to thorough isolation from the disease until all danger from contagion had passed.

Four cases have been cared for at the contagious disease hospital.

Four hundred and seventy-six houses have been placarded, and the placards removed at the termination of the disease.

About 2,500 pamphlets issued by the State Board of Health have been distributed in the localities where contagious disease existed.

Weekly reports of contagious and infectious diseases have been sent to the State Board of Health, Concord, and the United States Marine Hospital service, Washington, D. C.

The inspectors have each in turn patroled the shores of Lake Massabesic, Sundays, holidays, and part of every other day from June 1 to October 1.

Thirty-three people who were found bathing in the lake were driven out and warned not to enter it again.

One hundred and eighteen dead fish were removed from the lake or its shores, and buried. Two cows were driven out of the water.

Nine persons were warned as to the disposal of sink-water.

Two parties were caught washing clothes in the lake, and one throwing washing water in the lake. Both were reprimanded and warned.

A pile of garbage found on the shore of the lake was burned. One party was restrained from throwing old pipe into the water. One privy was ordered cleaned.

Nuisances to the number of 14, not otherwise classified, were abated.

Several picnics and band concerts were attended, to prevent the careless disposal of waste and rubbish in the lake or on its shore.

Banana skins, sawdust, tin cans, paper, and rubbish of all sorts, have been removed whenever found.

The inspection of plumbing has, as during the last two years, been attended to by Richard J. Barry, with the following results:

Number of jobs reported.....	798
tank water-closets.....	1,062
pressure closets.....	73
Kelley & Genesee closets.....	20
sinks.....	662
bath-tubs.....	449
wash-bowls.....	358
wash-trays.....	78
slop-hoppers.....	8
urinals.....	4
Total number of fixtures put in.....	2,674

The pipe put in was tested with water in 697 places. At 15 places where water was not accessible, the smoke test was used in place of water.

A total of 2,289 inspections were made of the work during its progress and after its completion.

At 243 places work was found defective. In all such cases the defective work was removed and proper work substituted therefor.

In several cases plumbers were found trying to deceive the inspector, but in most cases the work has been more expertly done than in previous years, as several parties who were inclined to be dishonest, or were incompetent from lack of knowledge and experience, have discontinued the occupation.

The inspector has been to some trouble to secure from his reports the following statistics as to new buildings, which he thinks may be interesting:

Total number reported.....	156
Single tenement buildings.....	98
Two-tenement buildings.....	29
Three-tenement buildings.....	17
Four-tenement buildings.....	3
Six-tenement buildings.....	2
Eight-tenement buildings.....	1
Sixteen-tenement buildings.....	1

New schoolhouses, 2; large apartment block, 1; cracker factory, 1; freight depot, 1; and police patrol stable, 1.

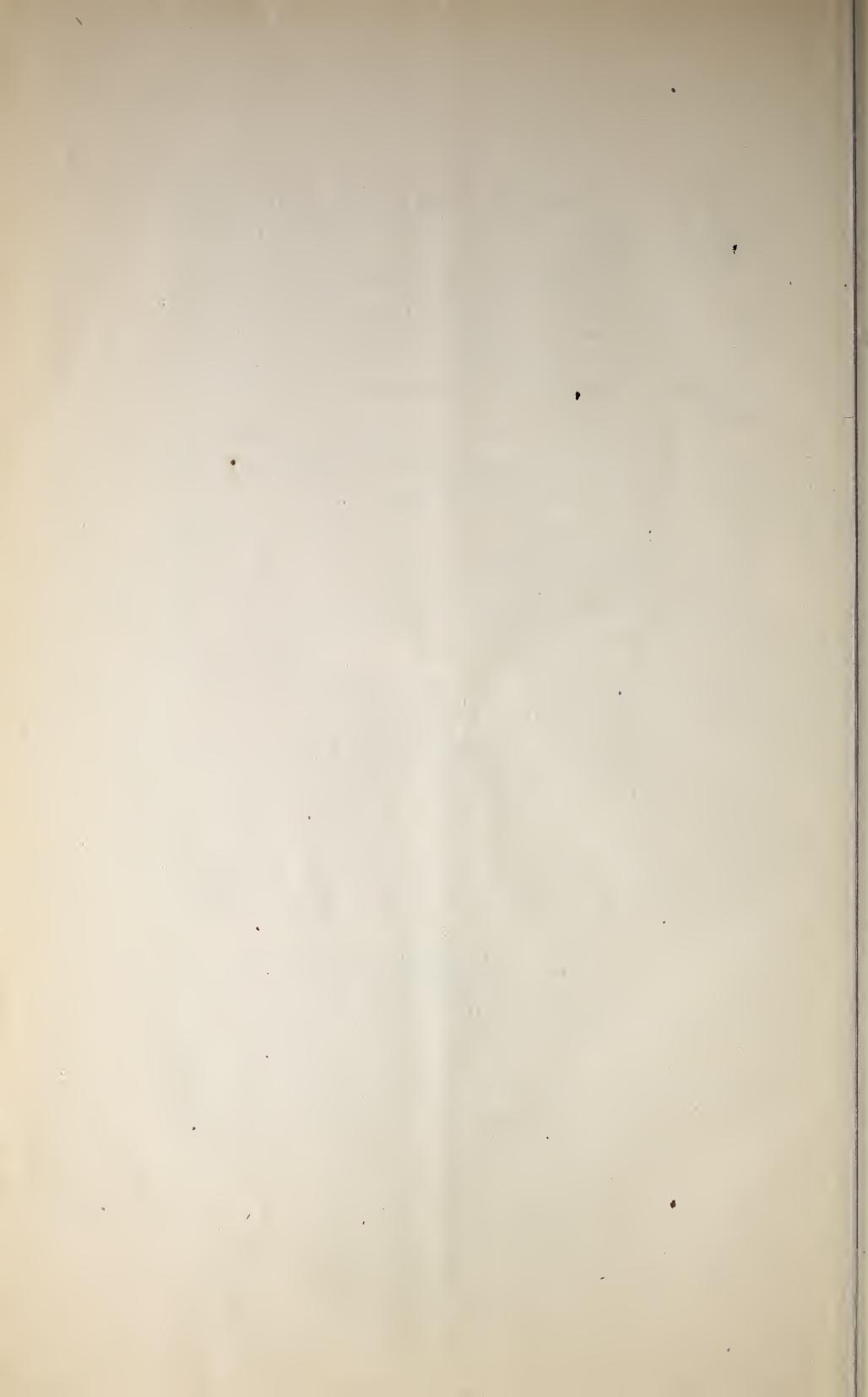
The total value, according to his best judgment, is \$700,000.

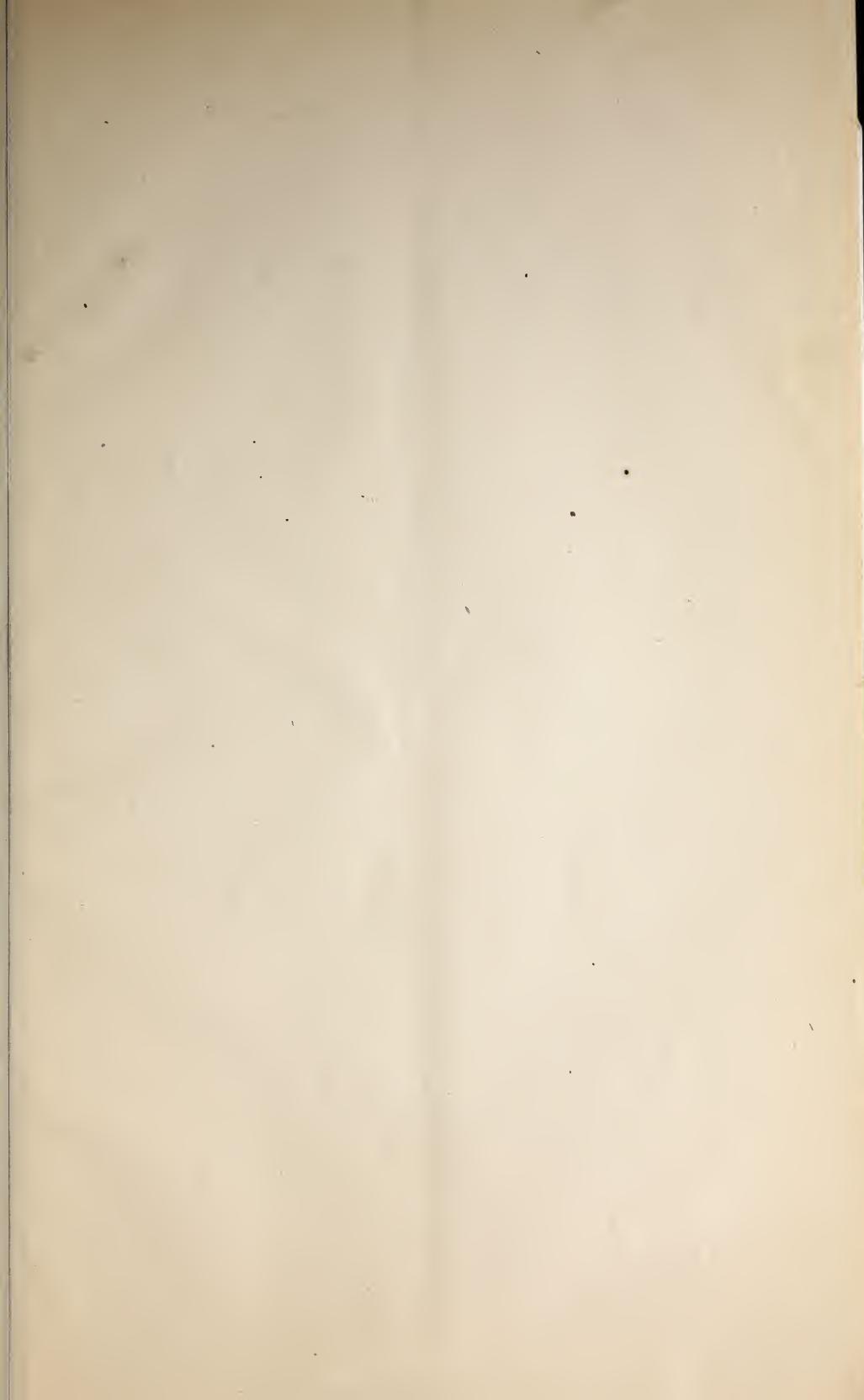
The inspectors desire to express their thanks to the honorable board who have so ably directed their efforts; also to all who have aided them in the work of the department.

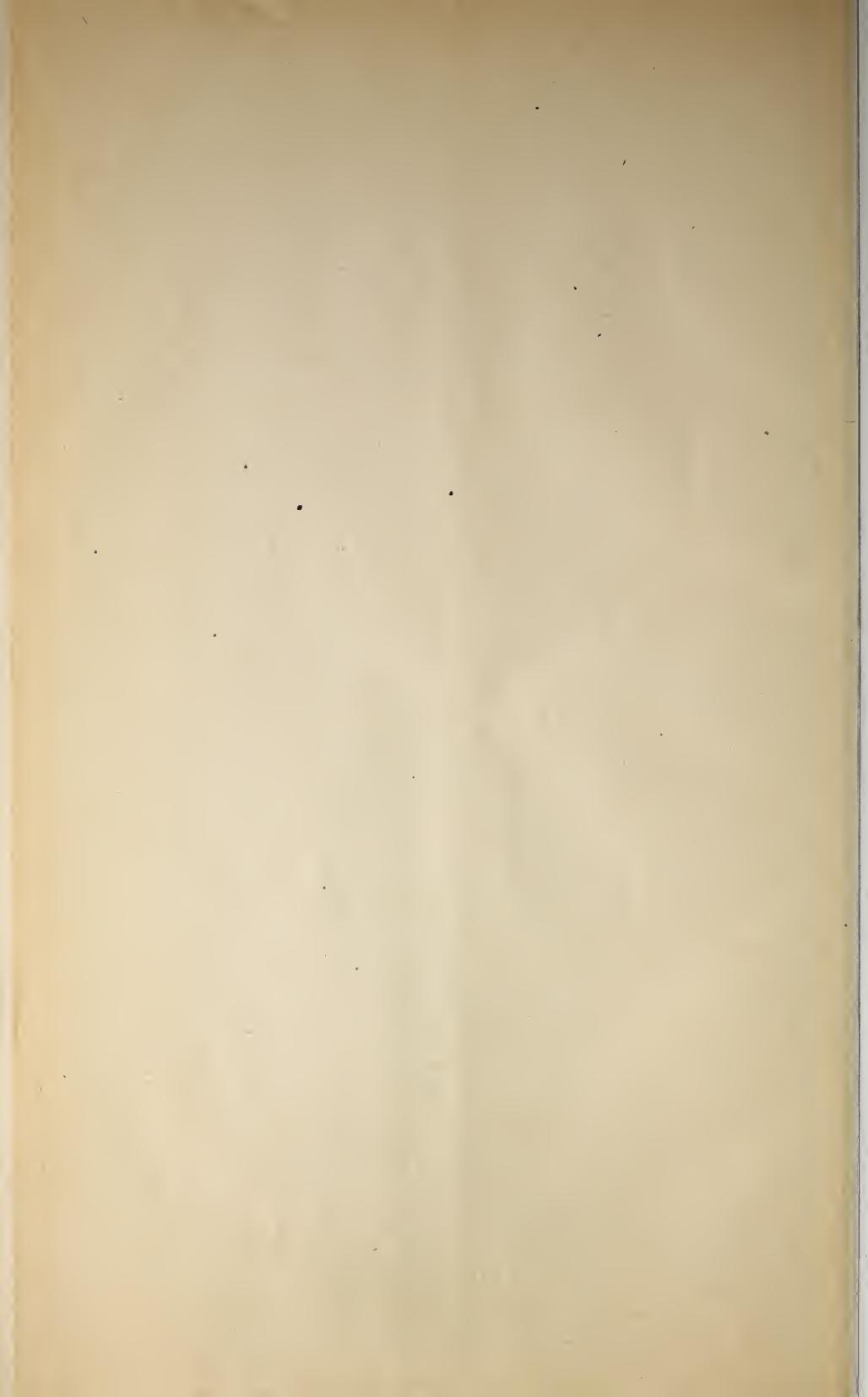
HERBERT S. CLOUGH.

JOHN F. LOONEY.

RICHARD J. BARRY.











**The HF Group**

Indiana Plant

**067034 2 300**



**8/22/2006**

